

**SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM**

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

I. Project Label: USGS Quad: Harrison Mountain
T,R,Section: 2N, 3W, Section 23
Thomas Bros: 518/C-3 2001 Edition
Planning Area: Lake Arrowhead
OLUD: LA/RS-14M
Improvement Level: IL-1

PROJECT DESCRIPTION:

1. **Project title:** Andy Bodewin, Hawarden Development (Tentative Tract 16185 on APN 331-251-07 with Conditional Use Permit for water tank on 331-251-08)
2. **Lead agency name and address:** San Bernardino County/Planning Division, 385 N. Arrowhead Avenue, First Floor, San Bernardino, CA 92415-0182
3. **Contact person and phone number:** Tina Twing, Senior Associate Planner, (909) 387-4112
4. **Project location:** Blue Ridge Drive, Southwest corner; Cumberland Drive, southwest corner; Lake Arrowhead Planning Area, S/3 (APN’s 331-251-07, 08)
5. **Project sponsor's name and address:** Andy Bodewin, 6945 Chartwell Drive, Riverside, CA 92506
6. **Consultant:** Dennis Stafford, McKeever Engineering, 647 N. Main Street #2A, Riverside, CA 92501
7. **Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.):

The proposed project is a Tentative Tract application to create 58 single family residential lots and 4 lettered common lots for roads and open space on 39.8 acres with a Conditional Use Permit application to request approval for a 20 foot high, 500,000 M/L gallon concrete water reservoir (partially buried in the ground), 52 feet in diameter, on one lot in the Tentative Tract, in the Lake Arrowhead Planning Area. The project is proposed to be developed in three phases. Phase I will consist of 26 numbered lots and 2 lettered lots on 13.3 acres, including the road prism, and the water storage tank. Phase II will consist of 24 numbered lots and 1 lettered open space lot on 21.3 acres. Phase III will consist of 8 numbered lots and 1 lettered open space lot on 5.2 acres. The project will be a private gated community and roadways will be private except for the 610-foot extension of Cumberland Drive. The applicant proposes lot sales with lots being developed on an individual basis. Sewer connection will be under the jurisdiction of the Lake Arrowhead Community Services District. A homeowner’s association will maintain the street and drainage improvements as well as the entry features and the common

landscaping. Approximately 9.3 acres of the site will be left as private open space. Two common open space lots will contain approximately 9.4 acres for a combined total of 18.7 acres of open space.

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

The 39.8 acre project site is situated primarily on the northeastern side of an unnamed peak, located between Orchard and Hook’s Creeks, and northwest of Hencks Meadow, along the main east-west trending ridgeline of the San Bernardino Mountains (See attached location map). The area consists of steep, heavily wooded terrain. As shown on the Harrison Mountain 1996 USGS Quadrangle Map, on-site elevations range from @ 5,720 feet (MSL) in the easterly portion of the property, to 6,042 feet (MSL) in the southwestern portion of the property. A slope analysis of the 39.8 acre site was submitted since the original project submittal, providing both the plan area in square feet and the surface area in square feet. An average of the two was taken, indicating that approximately 4% of the site is on zero to less than 15 % grade (1.79 ac), 28% is on more than 15% but less than 30% grade (11.8 ac), 31% is on more than 30% but less than 40% grade (13.05 ac), and 37% is on 40% or greater grade (14.97 ac). Thus, 68-plus percent of the site has slopes over 30% or greater.

According to the Forester’s Report, based on the physical evaluation of 4.55 acres of the site that were inventoried, there are an average of 217 trees per acre for an estimated total of 8,680 trees on the site. These trees are classified as part of a Sierran Mixed Conifer Forest with trees in the range of 70-200 years old. Several old logging roads meander through the site. There does not appear to be any evidence of recent use. Cumberland Drive, a County-Maintained Mountain Secondary Highway, runs from the north boundary of the site up to State Highway 173, providing access to the site.

Drainage of the site is by sheet flow. Per the Drainage Study, water sheet flows off-site northerly and westerly toward Orchard Creek and Cumberland Creek and southerly and easterly into two unnamed drainage courses which trend toward Hencks Meadow and into Hook’s Creek.

The site is undeveloped. Surrounding the site to the north and west is the Cedar Ridge Development of single family homes (TR 12783), to the south an organizational church camp known as “Wylie Woods”, and to the east, vacant land that is part of the old Santa’s Village property.

	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT	IL
North	Single family housing/Cedar Ridge Dev.	LA/RS-14M	IL-1
South	A church organizational camp known as “Wylie Woods”	LA/RS-14M	IL-1
East	Vacant land, part of the old Santa’s Village property	LA/PD-1	IL-1
West	Single family housing	LA/RS-14M	IL-1

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

State of California: Caltrans, Department of Fish and Game, Lahontan Regional Water Quality Control Board; County of San Bernardino: Land Use Services – Building and Safety and Code Enforcement, Environmental Health Services Division of the Public Health Department; and Local: Lake Arrowhead Community Services District.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input checked="" type="checkbox"/> Land Use/ Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

- ☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature (prepared by)

Date

Signature
For Land Use Services Director

Date

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
I. AESTHETICS ? Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (check ☐ if project is located within the viewshed of any Scenic Route listed in the General Plan):

I a-c) The visual setting of the proposed project site is a mixture of scattered low-density residential, mountain landscape, and undeveloped montane forest habitat. The proposed project is not located within the viewshed of a designated Scenic Route as listed in the General Plan. However, the project site is located in an area of scenic value, as defined by General Plan Policy OR-50.

According to the revised Forester's Report, prepared by James Bridges and John Hatcher, dated March 11, 2002, the proposed project site contains a total of @8,680 trees (@217 trees per acre) and more than 4,848 trees with a diameter at breast height of 6 inches or greater. The report grouped together trees with a diameter of 2-to-6 inches, so that the number of 6 inch diameter trees on site would be greater than 4,848 trees. According to the report, the project (if approved and constructed) would result in the removal of approximately 1,463 trees with a diameter at breast height of 6 inches or greater (30%). This number is probably an underestimate due to the fact that the conceptual building envelopes on the site plan assume 3,000 square foot building footprints. It also does not include any fuel modification zone which may be required by the Fire Department, nor does it calculate the tree loss from the construction of required drainage improvements. The Fuel Modification Plan calls for a 100-foot wide fuel modification zone and a 30-foot wide clearance around each structure, which will result in a significant loss of trees, creating an addition visual impact. One can observe the homes along Cumberland in the Cedar Ridge Tract to evaluate the size of homes and amenities which will most likely be involved in this project. This project proposes lot sales only. Therefore, certain requirements should be delineated on the Composite Development Plan (CDP). Mitigation Measures are listed below.

Although the project site is surrounded by developed uses on three sides, the site itself is in relatively pristine condition. Approximately 8.8 acres (Lot "A"), located in the southwestern portion of the property plus 0.6 acres (Lot D) in the northeast portion of the site, totaling 9.4 acres of forested land will be maintained as community open space.

The Forester's Report assumes an even distribution of the residual trees; however, this is not the case as tree removal is not evenly distributed over the entire acreage. Thinning and risk/hazard reduction should be done

throughout the project area prior to sale of the lots and construction of the homes. It appears that the stand is "overstocked" and in need of treatment to improve health and vigor, reduce fire hazard, and remove diseased or insect-infected trees prior to homes being built, since the project is a lot sales project.

The project site is located on the northeasterly face of an unnamed prominent ridge located in the Lake Arrowhead area. Full development of this site could potentially alter the existing vista southward, replacing an undeveloped ridgeline with substantial grading to accommodate the roads, water storage tank and future residences. Crib walls up to 20 feet in height are proposed, mostly on the down slopes. Because of the forested nature of this site, such development has the potential to dramatically alter and degrade the existing visual character of the site.

The applicant's engineer estimates the amount of grading on site at 75,000 cubic yards. Based on this figure, together with the Preliminary Geotechnical Investigation, dated May 29, 2001, prepared by Independent Geotechnical Consultants, Inc., which identifies cut slopes up to a maximum of 45 feet in height, it has been determined that the on-site grading has the potential to substantially degrade the existing visual character of the site and potentially alter the existing vista southward. The main circulation route through the site will be 40 feet wide with a maximum horizontal width of 68 feet graded on the upslope and 90 feet graded on the down slope, for a total swath through the tract of a maximum horizontal width of 198 feet, where trees could be removed. Cut and fill slopes are slow to revegetate in the granitic substructure that occurs on site. There are examples of denuded cuts and fills that have remained denuded for decades. The light colored granitic surfaces provided areas of high color contrast with the surrounding vegetated areas and are highly visible from many viewing locations throughout the Lake Arrowhead area.

Based on these factors, the County concludes that the proposed project may potentially result in a significant adverse impact on a scenic value. The potential impact should be more thoroughly evaluated in an environmental impact report.

I d) Lighting in the residential areas will be consistent with the existing lighting in adjacent residential areas and will comply with the County's standard lighting requirements for residential areas. Since no large-scale night lighting or related glare will be created by the proposed project, no mitigation is required.

The mitigation measure listed below would reduce the potential impacts related to land disturbance. However, for the reasons set forth in this section, the proposed project would still have the potential to significantly impact the environment in the area of Aesthetics. This potentially significant impact should be evaluated in an environmental impact report.

Mitigation Measure I a-c) A precise building envelope for each lot shall be shown on the Composite Development Plan (CDP), incorporating all areas of land disturbance and identifying all trees 6 inches in diameter or greater to be removed. If a precise building envelope is not shown on the CDP, any land disturbance shall be approved by the Planning Division prior to issuance of building permits for any lot. Tree removal shall be approved by the Planning Division for each lot in the tract. These requirements shall be noted on the CDP.

The potentially significant visual impacts identified should be evaluated in an environmental impact report which should incorporate a visual impact analysis and identify possible mitigation measures.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
II. AGRICULTURE RESOURCES ? In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (check _ if project is located in the Important Farmlands Overlay):

II a-c) The subject property is not identified nor designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. No evidence of agricultural activities exists on or near the site. The proposed use will not conflict with any agricultural uses nor impact a Williamson Act land conservation contract. The site does not contain agricultural soils and the location is not conducive to crop production due to montane climatic conditions. No impacts are anticipated and mitigation is not required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
III. AIR QUALITY ? Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (discuss conformity with the South Coast Air Quality Management Plan, if applicable):

III a-d) The South Coast Air Quality Management District (SCAQMD) CEQA Handbook identifies single-family residential projects with less than 166 units as being presumed to be less than significant from an air quality standpoint. Further, the District establishes a quarterly acreage of 177 acres as being below the threshold for significance. The project falls below both standards.

The project is not forecast to exceed any SCAQMD daily emission thresholds. Based on these conclusions, the project emissions are not considered to be significant from either a project specific or cumulative standpoint since the project fully conforms with regional population projections.

Project construction will generate short-term emissions of air pollutants. Construction-related emissions would primarily be dust generated from earthmoving, excavation, and other construction activities; hydrocarbons from asphalt; exhaust emissions from diesel-gasoline powered construction equipment; and motor vehicle emissions associated with worker travel to and from the job site as well as material delivery. This would create a short-term significant impact on air quality, especially in the mountains where construction activities would not be probable during the winter months but would, instead, occur during the spring through autumn period when air quality is at its worst.

Mitigation measures are recommended and are listed below.

III e) A residential project such as the subject project has no potential to emit significant quantities of odors and does not cause changes in area climate. No impacts are anticipated and no mitigation is required.

Possible significant adverse impacts have been identified or are anticipated and the following mitigation measures are required as conditions of project approval to reduce these temporary construction-related impacts to a level below significance.

Mitigation Measure III-1 During construction, the contractor shall apply water to the disturbed portions of the project site at least two times per day, in the morning and in the afternoon, or more often if fugitive dust is

observed migrating from the site. On days when wind speeds are sufficient to transport fugitive dust beyond the working area boundary, the contractor shall increase watering to the point that fugitive dust no longer leaves the property (typically a moisture content of 12%), and/or the contractor will terminate grading or loading operations.

Mitigation Measure III-2 During construction, the contractor shall provide verification that all construction equipment is in proper tune per the manufacturer's recommendations.

Mitigation Measure III-3 Revisions to SCAQMD Rule 403 require that tires of vehicles be washed before a vehicle leaves the project site and enters a paved road. These revisions also require that dirt on paved surfaces be removed daily to minimize generation of fugitive dust. The contractor shall implement both of these measures during on-site construction activities.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES ? Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database X):

IV a & d) A Biological Assessment of the site, dated September 7, 2001 was prepared by Thomas Leslie Corporation. Focused Southern Rubber Boa field surveys were performed on December 1, 2000, May 5 and 6, 2001, June 2 and 3, 2001, July 2, 2001, and August 26, 2001. The Biological Assessment performed in 2001 (1st year) states that, although no transects were walked, the entire tract was surveyed. This (1st year) assessment determined that "only marginally, potentially suitable habitat is present within the boundaries of the property", and "only a few rotting logs, used for cover by the Southern Rubber Boa (SRB), occur on-site". No SRB were observed during this survey. The recommendation was that "No further SRB surveys are recommended".

This (1st year) assessment determined that no potentially suitable habitat (streams, pools, etc.) occur on the TTM 16185 site, for the Mountain Yellow-legged frog (MYLF). No MYLF were observed onsite during this survey and the recommendation was that, "No further MYLF surveys are recommended". This report is silent and includes no information regarding potential off-site impacts to the Yellow-legged frog.

Southern Rubber Boa

The focused presence/absence survey for SRB performed during the spring 2002 (2nd year) states that nine survey periods were performed on seven survey days between April 6 and 28, 2002. There are conflicting statements in this report as to the scope of this (2nd year) survey. On pages 8 and 11, the report states, "Focused SRB surveys were conducted throughout the entire TTM 16185", however, Appendix A (Photo Plate No 1) states, "The April 2002 SRB searches performed on Tentative Tract Map No. 16185 were conducted (a) along the center line (CL) of all proposed project streets, and (b) within a 100 foot wide swath to the right and to the left of all center lines where driveways and residential pad sites will be constructed".

Five (5) Southern Rubber Boa were found on site, in association with two tree-stumps; two snakes were found on April 21st and three snakes were found on April 28th, 2002. The applicant has advised staff that two of the SRB found were moved to a site approved by the State Department of Fish and Game, in conjunction with recommendations made by Dr. Glenn Stewart of California Polytechnic University, Pomona. The Department of Fish and Game advised the consultant, the Leslie Corporation, that the Department, Dr. Stewart and the Forest Service recommended that the encountered SRB be relocated to the nearest possible suitable site. The site chosen is on Forest Service Lands. It is unclear whether permits were obtained to handle the snakes.

Based on the findings of SRB presence/absence survey (Spring, 2002), the consultant is recommending mitigation of 4.59 acres based on the following calculations:

.02 acres occupied habitat mitigated at 5:1 ratio	= .10 acres
.63 acres of potentially suitable but unoccupied	

habitat mitigated at 3:1 ratio	= 1.89 acres
estimated 1.30 acres of 'travel area' mitigated at a 2:1 ratio	= 2.60 acres

TOTAL Mitigation	= 4.59 acres

The 4.59 acres would either be purchased or fee-payment for purchase. Additional recommended mitigation measures include obtaining a Section 2081 permit from the California Department of Fish and Game and performance of pre-grading surveys prior to surface disturbance.

In light of these recommendations, there is some conflicting information in the Biological Reports that must be considered. First, the 2001 (1st year) assessment stated, "only a few rotting logs, used for cover by the SRB occur on site". The 2002 (2nd year) assessment, Appendix F, identifies in excess of 140 downed logs, decomposed logs and stumps on site. Second, the 2002 (2nd year) survey was halted upon locating SRB on site. Therefore, it is unclear as to the status of any remaining un-surveyed areas. Third, the consultant's calculations for determining mitigation acreage (summarized above) are based on a narrow interpretation/definition of "occupied habitat", "potentially suitable habitat", and "travel area". The consultants interpretation/definition is limiting, whereas (as stated on page 2 of the 2002 assessment), "the San Bernardino National Forest considers the general vicinity of TTM 16185 to be SRB habitat, and (as stated on page 29 of the 2001 assessment), the entire property is within SRB habitat, "as illustrated on the San Bernardino County Official Land Use Plan Map (Figure 6)". (The consultant meant to reference the County's Biological Resource Overlay Map.)

In describing the project site, the phrase "potentially suitable habitat" is used differently between the 2001 (1st year) report and the 2002 (2nd year) report. In the 2001 (1st year) report, due to the site being described as only having a few rotting logs, the site was considered "marginally, potentially suitable habitat". In the 2002 (2nd year report) "potential suitable habitat" is defined as "downed logs, tree stumps, rock outcrops, piles of leaves and branches, litter/duff and a few small openings in the forest canopy (pg. 2)". Further, on page 12 of the 2002 report, it is stated that "potentially suitable habitat", is "located over the entirety of TTM 16185". Therefore, 4.59 acres may be an understatement of appropriate, adequate mitigation.

The Department of Fish and Game has advised the consultant and the applicant that a 2081 Permit must be acquired and that the developer will be required to fund on-site and off-site mitigation. A Mitigation and Monitoring Plan will be required, and a non-waiting endowment to be established to fund the cost of any activity and management. The Thomas Leslie Corporation has prepared a draft mitigation proposal, which has been submitted to the Department of Fish and Game. Department staff will be preparing a written response incorporating their recommended mitigation measures. However, that response has not yet been received.

The SRB has been found to inhabit the project site. A significant amount of direct disturbance will occur via road construction, installation of utilities, provision of a fuel modification zone, pad grading and home construction. The Southern Rubber Boa is a California Department of Fish and Game State-listed Threatened Species and a U.S. Fish and Wildlife Service Species-of-Concern upon which the proposed project will have a potentially significant impact. An Environmental Impact Report is required to more thoroughly evaluate the potential impacts to the Southern Rubber Boa.

Mountain Yellow-legged Frog

Although no suitable habitat exists on-site, potential off-site impacts to this species should be evaluated. The proposed project will create drainage/runoff that will carry to Hook's Creek. According to the Carlsbad Office of Fish and Wildlife:

"The project site's impact on Hook's Creek should be checked out as Hook's Creek is within the frog's range. No actual frogs have been found at Hook's Creek yet, because, no survey's have been done for it".

The U.S. Fish and Wildlife Service recently listed the Yellow-legged frog as an endangered species pursuant to the Endangered Species Act of 1973 (as amended). Fish and Wildlife is recommending a habitat assessment be done and possibly a survey for the Mountain Yellow-legged frog (off-site impacts). Potential off-site impacts to the Mountain Yellow-legged frog should be evaluated in the Environmental Impact Report.

IV b) No riparian or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or the U. S. Fish and Wildlife Service were identified on the project site. A portion of the project will drain to Hook's Creek. According to the project engineer, McKeever, the amount of drainage will be slight and there will be minimal impact on Hook's Creek, which is an ephemeral stream and currently does not contain any water. Erosion and Sediment Control and Storm Water Pollution Prevention practices will also minimize any potential impact to Hook's Creek. Therefore, no substantial adverse effect on any riparian habitat or other sensitive habitat, other than noted above, are anticipated and no mitigation is required.

IV c) According to the assessment by the Thomas Leslie Corporation, no riparian habitat or wetlands were observed on site within the boundaries of the project site. The drainages on the property were determined to be non-jurisdictional topographic swales and, therefore, not subject to the regulations in Section 404 of the Clean Water Act as "Waters of the United States", nor "Streambeds of the State" under Section 1600 of the Fish and Game Code. Specifically, no flowing or standing water, growth of riparian habitat or wetlands were observed on-site during the field survey. The USGS Quadrangle sheets (7.5' Series, Harrison Mountain and Lake Arrowhead) identify three potentially jurisdictional stream courses on the property, but were determined by the Thomas Leslie Corporation to be topographical swales that lacked definable beds and banks and, therefore, are not subject to jurisdictional waters and streambed regulations. No significant impact is anticipated to affect any riparian or stream resources and no mitigation is required.

IV e) A Forester's Report, dated March 11, 2002, was prepared by James Bridges and John Hatcher, both Registered Professional Foresters. The Forester's Report included a marked up copy of the tract map showing specific tree locations along roads and building envelopes, where trees will be removed, with a chart listing the type, size, and species of the identified trees. The sampling methodology (timber cruise) is adequate for a general estimate of total number of trees over the entire site and for those to be removed within the road prism, but the estimate used for trees that may be removed within "constructed of individual building pads and driveways" is probably underestimated since only 3,000 sf of area was used and since the trees to be removed as a result of the construction of the water storage reservoir and the placement of the accessory equipment, the grading for construction of drainage improvements in Open Space Lot and the fuel modification zone, that will be required by Fire, were not taken into consideration. The homes that are being built in this area are quite large (4000-6000 sf homes) with retaining walls, driveways, patios, etc. The analysis of "Residual Timber Stand" does not have any meaning for a development project as this analysis incorrectly assumes an even distribution of the residual trees (those left after road and building construction). Tree removal will not be evenly distributed throughout the development. The same existing stand characteristics will still exist on the undeveloped portion of the project.

The County of San Bernardino has a plant protection ordinance, to protect native trees and plants from indiscriminant removal. The proposed project will require the removal of 1,463+ of the 4,848+ trees with a diameter at breast height of 6 inches or greater. These numbers are understated as trees with diameters ranging from 2 inches to 6 inches were grouped together in the report. Additional trees will require protective measures to prevent potential damage by construction activities. The San Bernardino County Plant Protection and Management Ordinance requires replanting trees on a 2:1 ratio. However, according to the Forester's Report, the forest on the property is overstocked in the lower diameter classes. Mitigation measures are listed below.

IV f) Based on available data, no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved location, regional, or state habitat conservation plan exists for the site location. No conflict can occur and no mitigation is required.

Possible significant adverse impacts have been identified or are anticipated. The following mitigation measures are recommended as conditions of project approval in an effort to reduce impacts on native trees protected by County Ordinance. Despite the recommended mitigation (below), and given incomplete information, the impacts upon trees from this project remains potentially significant.

Mitigation Measure IV-1 A qualified forester shall identify trees that could potentially be impacted by construction after survey stakes are in place. All efforts shall be made, including implementation of protective measures, to avoid removing or damaging trees with a DBA greater than 6 inches, during construction.

Mitigation Measure IV-2 A Timber Harvest Plan shall be required, pursuant to the State Forest Practice Act, to be approved by the California Department of Forestry (CDF). A Timberland Conversion Permit is also required from CDF, prior to removal of native trees from the project site.

Mitigation Measure IV-3 A tree inventory within a realistic development envelope shall be prepared, identifying the trees by species and size (diameter) per Development Code requirements. A Tree Preservation and Management Plan shall also be prepared. Both these documents shall be prepared by a State-Registered Professional Forester, for approval by the County, prior to removal of native trees from the project site.

The potentially significant biological impacts which could result from this project should be evaluated in an environmental impact report.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES ? Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION (check if the project is located in the Cultural _ or Paleontologic _ Resources overlays or cite results of cultural resource review):

V a-b) The proposed project site is located in an area with potential for archeological and historical resources. The records check for the project area indicated a potential for such resources on the project site and the immediate area. Therefore, to keep the impact on archeological and historical resources to a level below significance, the mitigation measures listed below shall be implemented.

V-c) No unique geologic features were identified on this project. No unique paleontological resources are expected to be encountered on this project site because the underlying bedrock is igneous in character, which does not contain paleontological resources. No impact can occur and no mitigation is required.

V-d) No available data suggests that human remains may occur on the project site and the potential for such an occurrence is considered low. To mitigate potential impacts to the greatest extent feasible, the mitigation measure listed below shall be implemented.

Possible significant adverse impacts have been identified or are anticipated. The following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significance.

Mitigation Measure V-1 - Prior to the issuance of grading permits, any land disturbing activity or recordation of the tract map, an archaeological and historical records test program shall be completed to locate and identify any archeological or historical deposits that might be present. If archeological or historical resources are encountered, adequate funding shall be provided by the developer to collect, curate and report on these resources.

Mitigation Measure V-2 – If archeological, paleontological and/or historical resources are uncovered during ground disturbing activities, all work in that area shall cease. A qualified expert (e.g. archeologist), as determined by County Planning, in consultation with the County Museum, shall be hired to record the find and recommend any further mitigation. If human remains are encountered on the property, then the County Coroner's Office must be contacted within 24 hours of the find, and all work halted until a clearance is given by that office and any other involved agencies. If the remains are determined to be of Native American origin, the local Native American representative shall be notified.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS ? Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (check X if project is located in the Geologic Hazards Overlay District):

VI a & c) The site is located in an area of southern California that is tectonically active and subject to moderate to severe ground shaking. The project site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone. A Preliminary Geotechnical/Engineering Geology Investigation, dated May 29, 2001, was prepared by Independent Geo-Environmental Consultants, indicates that the site could be subject to severe groundshaking in the event of a major earthquake. Construction will be required to conform to the standards set forth in the Uniform Building Code. These standards are intended to allow a building to remain standing long

enough to allow residents to evacuate. However, these standards will not necessarily prevent damage to structures which may, in some cases, be severe enough to ultimately result in the demolition of the structure after an earthquake.

The report concluded that cut slopes associated with the roadways as steep as 1.5:1 (horizontal to vertical) and as high as 45 feet will be stable, provided they are created within granitic bedrock. Any cut slopes proposed steeper or higher than that analyzed in the report will require additional evaluation. The County Geologist reviewed and approved the Preliminary Geotechnical/Engineering Geology report on October 1, 2001. The County Geologist's recommended mitigation measures are listed below.

The site is located on moderately to steep sloping terrain, with 68+ percent of the site containing slope of 30% or greater, with low susceptibility to landslides. However, there are scattered rocks and boulders on the property that could pose a threat to future structures from rockfalls. The site location may be susceptible to seismically or hydrologically-induced settlement because of surficial soils and/or undocumented fill soils beneath portions of the proposed development. Implementing the below listed mitigation measures should reduce landslide hazard to a less than significant level.

The possibility of liquefaction on the site is close to none as the majority of the site is underlain by dense crystalline bedrock materials.

VI b) County grading standards, Best Management Practices (BMP's) and the Storm Water Pollution Prevention Plan (SWPPP) can and will be required to control the potentially significant erosion hazards. Due to the proposed grading disturbance of site preparation (75,000 cubic yards), a potential for a significant impact in the category of soil erosion does exist. Mitigation measures identified under the Water issue discussion address the potential for significant erosion and how it could be controlled on the project site. A project-specific Erosion and Sediment Control Plan, specifying the measures to be implemented, will be required. However, it has not been prepared yet, and cannot be prepared until a grading plan is also prepared. In the absence of an approved erosion and sediment control plan, a determination cannot be made that it is possible to fully mitigate potentially significant impacts to a level below significance. This issue should be addressed in an environmental impact report. Mitigation measures have been identified below.

VI d) No impact is anticipated and mitigation is not required.

VI e) Sewer lines will be constructed by the project to collect all wastewater created by the proposed project. Thus, no impact can be identified for septic systems and no mitigation is required.

Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval:

Mitigation Measure VI-1 – Place as a note on the Composite Development Plan: Foundation and grading plans must be reviewed and signed by a geotechnical engineer. Unless superseded by a subsequent geotechnical investigation, must reference the geotechnical report for the tract (dated May 29, 2001) and the response report (dated September 11, 2001).

Mitigation Measure VI-2 – Place as a note on the Composite Development Plan: Unless otherwise recommended by a geotechnical engineer, footings shall be a minimum depth of 24 inches and bear into competent bedrock or be underlain by at least 24 inches of compacted fill. All footing excavations must be

inspected and approved by an engineering geologist when placed within bedrock or a geotechnical engineer when placed within fill.

Mitigation Measure VI-3 – Place as a note on the Composite Development Plan: The May 29, 2001 report concludes that roadway cut slopes within bedrock as steep as 1.5:1 (horizontal to vertical) and as high as 45 feet will be stable. Steeper or higher cut slopes shall require additional evaluation.

Mitigation Measure VI-4 – Place as a note on the Composite Development Plan: The Project Geotechnical Engineer and Project Engineering Geologist must review and sign grading plans for the road construction as well as foundation plans for crib wall construction. A compaction report must be submitted upon completion of rough grading for the roadways and associated cuts and fills.

Until the Erosion and Sediment Control plan is submitted and reviewed, a determination cannot be made that adequate mitigation can be identified to lessen the impact of soil erosion to a less than significant level.

The potentially significant impact of soil erosion should be evaluated in an environmental impact report.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS ?				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

VII a-b) Other than some petroleum products used during construction, this project will not include the routine use or storage of other than household quantities of hazardous substances and no explosive substances. During construction, there is a potential for accidental release of petroleum products in sufficient quantities to pose a significant hazard to people and the environment. None of the future activities on the project site has the potential to generate significant emissions of toxic air contaminants or otherwise affect public health, either onsite or offsite. Mitigation measures are listed below.

VII c) There are no schools located within a quarter-mile radius of the proposed project site. No impact is anticipated to occur and no mitigation is required.

VII d) Review of all available data indicates no past uses that may have involved hazardous materials. The landform appears to be essentially natural with some surface disturbances associated with human activities (walking, equestrian, vehicles, etc.) No mitigation is required.

VII g) The proposed project does not have the potential to cause interference with an adopted emergency evacuation plan in this specific mountain area. Blue Ridge Drive is being proposed as an emergency secondary access for the project. This road is also designated as emergency access for the Cedar Ridge development (Tract 12783) with a total of 136 lots. This roadway is not maintained by the County. It is gated where it intersects with Cumberland Drive and gated where it intersects with Greenbriar Drive. The Fire Department has indicated that the section between the two gates needs to be widened to a minimum of 16 feet for adequate access in times of emergencies. To the south of the second gate, vehicles will be able to use both Blue Ridge Drive and Greenbriar Drive as emergency access to the south, ultimately connecting with State Highway 18. The Fire Department has indicated that emergency fire equipment would access the site from Cumberland Drive to the north. The Fuel Modification Zone Assessment which incorporates the Fire Safety Analysis have been reviewed by the Fire Department. The mitigation measures identified in this report have been determined by the Fire Marshall to be sufficient to reduce impacts from wildland fires to a level below significance. These mitigation measures are listed below.

VII h) The Background Appendix to the General Plan (Fire Section), which was adopted with the General Plan in 1989, identifies topography as a major concern in determining fire hazard. Other critical factors include

vegetation, climate, and human use and occupancy. The report states that whenever two or more critical factors are present, the risk of a wildland fire increases dramatically. According to the second paragraph on this page (BA-II-A-117), the mere presence of human occupancy increases the risk of a major wildland fire dramatically. If the steepness of the slopes, especially on the south side of the ridgeline, the fact that the winds blow up that steep slope, the limited access, the duff, grasses and under-story of the forested site, especially on the south side of the project boundaries, and the proposed human occupancy are considered, there is a potentially significant impact from the risk of wildland fires. On Page BA-II-A-118, Figure 7 indicates that on slopes greater than 40% with medium scrub present, the designation should be "High Hazard". The County Fire Department has determined that the mitigation measures identified in the Fuel Modification Plan for this project are sufficient to reduce fire hazards to a level below significance.

According to the County Fire Department, the standard Fire Hazard Overlay Level FR-2 requirements, along with Hazard Overlay FR-1 requirements for specific lots, will mitigate potential exposure of people or structures to significant risk of loss, injury or death involving wildland fires.

The Forester's Report has identified tree density as a fire hazard unless the overstory is thinned to maintain the health of the forest in this area and to reduce fire hazards. The mitigation measures recommended by the Forester's Report are listed below.

Potential significant adverse impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval.

Mitigation Measure VII-1 - If a hazardous or toxic substance is discovered or released during construction, the applicant and/or contractor shall properly clean up and remove any contaminated soil or other material; restore the affected area to background conditions or to regulatory threshold levels for the contaminant(s) accidentally released or discovered; and deliver the contaminated material to an appropriate treatment, recycling or landfill facility in accordance with the regulations of the type of contaminant accidentally released and collected for management.

Mitigation Measure VII-2 The fuel modification requirements identified in the Fuel Modification Plan shall be implemented through Covenants, Conditions and Restrictions of Record (CC&R's) and shall be noted on the Composite Development Plan (CDP) for this tract.

Mitigation Measure VII-3 The Covenants, Conditions, and Restrictions (CC&R's) for the project shall include a provision to prohibit the stockpiling, disposal, or dumping of any solid or liquid waste material or chemical on any residential lot (e.g., automobile oil, or other fluids, cleaners, etc.) during construction or occupancy.

Mitigation Measure VII-4 Prior to the issuance of building permits, each individual lot owner shall meet with County Fire to determine the necessity of one-hour construction and to review fuel modification requirements and other safety measures identified in the Fire Safety Analysis. This requirement shall be addressed in the Covenants, Conditions and Restrictions of Record (CC&R's) and referenced on the Composite Development Plan (CDP) for the project.

Mitigation Measure VII-5 – Automatic fire sprinklers shall be installed in all structures.

Mitigation Measure VII-6 – This development is located in the FR-2 Overlay. This development shall comply with Fire Safety Overlay Two (FR-2) conditions as adopted in County Ordinance No. 3341. Homes that will be constructed on Lots 35, 39, 40, 45, 49-52, 54, and 55 shall have fire conditions reviewed structure by structure

to determine if they are subject to FR-1 or FR-2 Fire Safety Overlay requirements. All other structures shall meet the FR-2 building requirements. The developer shall use double-paned windows and one-hour construction in specified areas. Each individual lot owner shall meet with San Bernardino County Fire Department to determine necessity of 1-hour construction prior to the issuance of building permits. This requirement shall be addressed in the CC&R's for the tract.

Mitigation Measure VII-7 – A one-hundred (100) foot wide fuel modification zone, in compliance with County standards and the fire protection analysis is required. This fuel modification zone shall be shown on the Composite Development Plan for this tract.

Mitigation Measure VII-8 – Due to the remote location, individual lot owners shall be required to provide their own fire protection measures as determined appropriate by the Fire Department prior to the issuance of any building permit. Fire protection measures may include all or some of the following:

- 1) Individual fire protection water systems for each lot;
- 2) Automatic fire sprinklers for all structures;
- 3) Installation of road surfacing;
- 4) A legal, binding road maintenance agreement establishing improvements from each project lot to a County-Maintained road.

Mitigation Measure VII-9 - All homes constructed shall comply with Fire Standard No. F17D (residential fire sprinklers) for homes less than 5,000 square feet and Standard No. F18R for homes over 5,000 square feet.

Mitigation Measure VII-10 - Fire hydrants shall be spaced at 300-foot intervals.

Mitigation Measure VII-11 - Wood shake roofs shall not be permitted in this tract.

Mitigation Measure VII-12 - Fuel modification for the open space lots and long-term fuel maintenance shall be addressed in the CC&R's for the Homeowners' Association (HOA).

Mitigation Measure VII-13 -Individual lots shall be maintained by homeowners per the Fuel Modification Plan and shall be addressed in the CC&R's.

Mitigation Measure VII-14 – Emergency access roads shall be a minimum of 16 feet wide.

Mitigation Measure VII-15 – Non-combustible insulation paper shall be used in attic vents with bafflers that face non-wildland side.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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VIII. HYDROLOGY AND WATER QUALITY ? Would the project:

- a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

VIII a) The County has adopted a set of best management practices to control discharges of pollution that could cause a significant impact to surface water quality. The "Best Management Practices for Erosion and Sediment Control and Storm Water Retention/Detention in Western Riverside and San Bernardino Counties"

document defines best management practices (BMP's) that, when applied to this project, will ensure that significant erosion and sedimentation, nor other water quality degrading impacts will occur from implementing the proposed project. This project has the potential to discharge varying amounts of urban pollutants such as motor oil, antifreeze, gasoline, pesticides, detergents, trash, domestic animal waste and fertilizers into Orchard Creek and ultimately into Lake Arrowhead, as well as into the Mojave River via Hooks Creek and Deep Creek. The below listed mitigation measures are recommended and have been incorporated as part of the proposed project design to ensure that surface runoff impacts from this project are reduce to a level below significance.

VIII b) No potential exists to directly intercept the groundwater table during the development of this project. The project will be supplied with water from the Lake Arrowhead Community Services District (LACSD). Their water is obtained from Lake Arrowhead.

The area within the project site that contributes flows to Orchard Creek (and ultimately into Lake Arrowhead) is approximately 1.9 acres, 5% of the total 385-acre Orchard Creek drainage area. The development of this portion of the site, per the Drainage Study prepared for this project by McKeever Engineering on July 27, 2001, will have minimal, if any, effect on the downstream drainage area. The southeasterly portion of the tract drains southeasterly within two natural drainage courses into the upper reaches of Hooks Creek, thence into Deep Creek and ultimately into the Mojave River. Although the Drainage Study did not include a similar evaluation for the Hook's' Creek drainage, McKeever engineering has concluded that the impact to Hook's Creek will be minimal.

VIII c) Surface flow at the project site is generated from precipitation falling directly onto the site and by snowmelt in the spring. The surface drainage study requires that the drainage improvements constructed for the proposed project ensure that the channels be sized and designed to carry the volume of flows forecast to occur within the channel after development. Based on the design of flood control systems recommended for the project, no potential for significant adverse impact to the established direction or velocity of surface runoff is anticipated to occur from implementing the proposed project.

VIII d) The project will result in changes in absorption rates and the rate and amount of surface runoff from the project site. With the introduction of structures and pavement, there will be a decrease in surface permeability by impermeable surfaces. Drainage patterns in portions of the project will be altered. According to McKeever Engineering, the downstream drainage courses have adequate capacity to convey the 100-year storm flows. No potential for significant impact from the increased runoff from the site is forecast to occur. No mitigation is required.

VIII e) Increase in surface runoff from the site as a result of increased impervious surface will be reduced before leaving the project site to a level that does not cause any substantial increased in runoff downstream. The onsite facilities will control the increased runoff consistent with the General Plan's requirements for flood control. No potential for significant adverse impacts due to the increased volume of flows is anticipated to occur and no mitigation is required.

VIII f) No activities are anticipated to occur as a result of implementation of this project that could cause any direct adverse impact to groundwater (except accidental release of pollutants during construction, which is addressed under the Hazards and Hazardous Materials Section of this document. Implementation of the surface water quality control measures outlined under Item c above will ensure that the project does not contribute to indirect impacts to groundwater quality. No mitigation is required.

VII g-l) The drainage analysis indicates that the project site is not exposed to any significant flood hazards, either from normal storm runoff or from any seismic-related water hazards. No potential for significant impact related to flooding or other water hazards is anticipated to occur and no mitigation is required.

VIII j) There is no possibility of seiches or tsunamis because there are no large bodies of water near the site.

Possible significant impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significance.

Mitigation Measure VIII-1 The developer shall provide adequate drainage facilities that will ensure that storm water runoff from the development does not cause an increase in downstream erosion, sedimentation, or flood hazards that exceed existing surface flows off the property. This may be accomplished by installing detention facilities, channel erosion control measures (bank protection or energy dissipation facilities), or other modifications to the road drainage system that will ensure no adverse impacts to the channel or the land uses downstream from the proposed development.

Mitigation Measure VIII – 2 Best Management Practices shall be incorporated into the Storm Water Pollution Prevention Plan that must be prepared and implemented for the project under existing Clean Water Act regulations. The “BMP’s for Erosion and Sediment Control and Storm Water Retention/Detention in Western Riverside and San Bernardino Counties” identifies specific measures that can be used to control water pollutants. The developer shall select from this mix or identify alternatives for approval by the County that will achieve a 60 to 80 percent removal of sediment, total phosphorus and total nitrogen.

Mitigation Measure VIII-3 The applicant shall implement the on-site drainage system improvements summarized in the July, 2001 Drainage Study Prepared by McKeever Engineering.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
IX. LAND USE AND PLANNING ? Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

IX a) The project site is located within an area designated for single family residential development with a minimum lot size of 14,000 square feet, allowing a maximum density of approximately 3 dwelling units per acre. A single family residential development exists to the north and west of the site, and a church camp is located to the south of this property. Thus, the proposed project will not physically divide the existing community.

IX b) The proposed project conflicts with the General Plan. The proposed project design does not appropriately recognize and address the topographical and site limitations. A slope analysis, submitted to the Planning Division in late April, 2002, indicates that 68+ percent of the site has slopes of 30% or greater with 37% of the site containing slopes in excess of 40% (14.97 acres). The slope analysis conflicts with the slope information provided in the original application. As a result of the new information it has been determined that the proposed project is inconsistent with the below listed goals and policies of the General Plan, and a Planned Development design should be utilized:

Mountain Planning Areas Goals and Policies (page III-C-7) "Encourage the use of the Planned Development concept in environmentally sensitive areas that have been assigned a residential land use category."

GE-15(g) "Require development on hillsides to be sited in the least obtrusive fashion, thereby minimizing the extent of topographical alteration required."

OR-57(a) "Discourage residential development on land with slopes greater than 30 percent, ridge saddles, canyon mouths and areas remote from existing access."

OR-57(b) "Require that natural landform and ridgelines be preserved by using the following measures:

- i. Keeping cuts and fills to an absolute minimum during the development of the area.
- ii. Requiring the grading contours that do occur to blend with the natural contours on site or to look like contours that would naturally occur.
- iii. Encouraging the use of custom foundations in order to minimize disruption of the natural landform.
- iv. Requiring that units located in the hillsides be so situated that roof lines will blend with and not detract from the natural ridge outline.

OR57(c) "Require that hillside development be compatible with natural features and the ability to develop the site in a manner which preserves the integrity and character of the hillside environment, including but not limited to, consideration of terrain, landform, access needs, fire and erosion hazards, watershed and flood factors, tree preservation and scenic amenities and qualities."

Cuts and fills are excessive, with slopes at 1.5:1 and cuts up to 45 feet in height. Crib walls up to 20 feet high are also proposed. The applicant indicated that approximately 75,000 cubic yards of grading is estimated, significantly altering the natural contours of the site. Since the project is a lot sales project, there is no proposal for custom foundations. With a Planned Development (PD) application, development could be moved away from the ridgelines and clustered in the less steep portions of the site, preserving the ridgeline as open space. Special development standards could be imposed to preserve the integrity and character of the hillside environment, with emphasis on custom foundations, colors compatible with the Forest environment, rooflines that blend with the natural contours of the land, and the preservation of more trees. These General Plan conflicts and design-related issues need to be more adequately evaluated in an environmental impact report. Project design solutions may be achieved through a Planned Development application and presented as a project alternative in the EIR.

IX c) Based on available data, no habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan exists for the site location. Thus, no conflict is anticipated to occur and mitigation is not required.

Significant impacts have been identified or anticipated and an environmental impact report is required to evaluate these impacts.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
X. MINERAL RESOURCES ? Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (check _ if project is located within the Mineral Resource Zone Overlay):

X a-b) No known mineral resources of local, regional or state importance are present on the project site. Therefore, the proposed project has no potential to prohibit or restrict development of a designated or significant mineral resource. Significant impacts are not anticipated and mitigation is not required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XI. NOISE ? Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION (check if the project is located in the Noise Hazard Overlay District ____ or is subject to severe noise levels according to the General Plan Noise Element __):

XI a & d) The proposed project will generate noise during both construction and occupancy. The residential uses will produce noise greater than the existing, undeveloped and heavily forested site, but the sound levels will be commensurate with the surrounding residential land uses and probably lower than the church camp that involves outdoor play activity. No significant noise impact is forecast to result from the occupation of the site as proposed. Construction noise levels can exceed noise thresholds for short periods, unless mitigated. To minimize construction noise impacts on the nearby residences, the below listed mitigation measures are recommended.

XI b) Construction employees may be exposed to severe noise levels from equipment operation during construction. However, occupational health and safety standards require hearing protection for individuals operating such equipment. No other source of severe noise is anticipated to occur on site during construction or occupancy of the project site. No further mitigation is required.

XI c) On site noise levels during occupancy will be comparable to that already found on the adjacent properties with similar uses. The development will be consistent with surrounding residential uses and none of these uses are major sources of noise. Therefore, no potential for significant noise impacts during occupancy is expected to result from implementation of the project.

XI e-f) The project is not located within the vicinity of a public or private airstrip. No potential aircraft safety issues are known to affect the project site. Other than occasional overflight of the site by private or commercial aircraft, air traffic does not occur immediately over or adjacent to the site. Based on this information, it is concluded that this project will not be exposed to any significant aircraft safety hazards, and no mitigation is required.

Possible significant impacts have been identified or anticipated and the following mitigation measures are required as conditions of project approval to reduce these impacts to a level below significance.

Mitigation Measure XI-1 Except during emergency conditions, outside construction activities shall be limited to daylight hours and no later than 7 p.m. on any given day. No outdoor construction will be permitted on Sundays or holidays, except during emergency conditions.

Mitigation Measure XI-2 All construction equipment shall be equipped with appropriate noise attenuation devices, such as mufflers.

Mitigation Measure XI-3 If noise complaints demonstrate a significant construction noise effect on a sensitive receptor (as measured at the receptor site (and compared to County noise significance thresholds), the County shall require that the construction contractor provide temporary noise attenuation panels or other measures to reduce impacts to the sensitive receptor(s) to within County thresholds.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XII. POPULATION AND HOUSING ? Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUBSTANTIATION:				

XII a) The proposed project has been submitted for approval with 58 single family homes at a density of 1.46 dwelling units per acre on 39.8 gross acres. The proposed homes are expected to be a mix of primary and secondary residences. The site is designated Single Residential – minimum lot size of 14,000 square feet (RS-14M) on the County General Plan. Maximum housing density in an RS-14M district is approximately 3 du/acre. No significant population growth impact is anticipated from the implementation of the proposed project because it is consistent with the maximum population density assumed for the RS-14M District in the County General Plan. No mitigation is required.

XII b-c) The site is currently undeveloped. No impact to existing housing resources will occur from implementation of the proposed project. There is no possibility that people will be displaced as no one lives on the site. No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XIII. PUBLIC SERVICES ?				

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following services:

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

XIII a) The water purveyor, Lake Arrowhead Community Services District (LACSD), has indicated that this project will not create servicing problems for the District nor would it result in significant cumulative demand impacts, as long as sufficient water pressure is provided in order to service the area. The LACSD originally requested 1,500 gallon per minute, but has agreed to allow 1,250 gallons per minute if that is the Fire Department requirement. The proposed reservoir, two booster pumps, fire pump and pressure tank to be located on Lot "B" of the project's first phase includes sufficient water capacity and pressure to provide for water demand including fire flow. The diesel fire pump will provide fire flow to the areas above 5,900 feet above MSL in the event of a power outage. The proposed project includes fire hydrants and fire access lanes.

LACSD infrastructure exists at the intersection of Cumberland Drive and Bald Eagle Ridge at the northeast corner of the proposed project. The 50 lots within Phases I and II will be served by a gravity wastewater collection system that will connect into the existing system at the intersection of Cumberland Drive and Bald Eagle Ridge. The 8 lots in Phase III will drain via gravity feed into a lift station located at the southerly terminus of Cumberland Drive. These flows will be lifted to the existing manhole at the intersection of Cumberland Drive and Bald Eagle Ridge. The average daily discharge from single family homes is @300 gallons per day. The maximum daily discharge from single family homes is @750 gallons per day. Thus, the project will create, at build out, an estimated 17,400 gallons of wastewater per day with a maximum potential of 43,500 gallons per day.

Two portions of the downstream wastewater system are currently operating above capacity. The overburdened sections of pipe are located at the intersection of Cumberland Drive, Hook's Creek Road and State Highway 173, as well as at the intersection of SR-173 and Emerald Drive. The cause of the capacity constriction is apparently flat grades.

The proposed project includes the construction of a 500,000 M/L gallon water reservoir, pump house, pressure tank and associated piping at 6,000 feet above mean sea level. The applicant's responsibility is a 300,000 gallon tank. The LACSD will be responsible for any capacity above 300,000 gallons. All lots in this tentative tract below 5,900 feet above MSL and all lots in Tract 12783-1 currently served by the hydropneumatic tank at the 5,700 feet above MSL reservoir will be served by a gravity booster system and fire pump. LACSD requests easements and the tank parcel deeded to them. They are calling for a new hydropneumatic booster pump, a diesel standby generator, and a pressure reducing station. In addition, the LACSD is requiring that the Zone 2 pumping station be expanded at Cedar Glen Water Treatment Plant at the Developer's cost. Expansion will involve the changing out of the existing pumps.

No hazardous or explosive materials will be used or stored on site. Based on the small size and nature of the project, as well as required implementation of structural fire protection requirements, the proposed project is not anticipated to significantly increase the need for new or altered fire protection services. Mitigation measures are listed below.

XIII b) The project site receives law enforcement protection from the County Sheriff's Department which has a station and patrols within the mountain top communities. The local Sheriff substation is located in Twin Peaks, approximately 4 miles west of the proposed project. No significant impact on police protection services is anticipated as a result of the proposed project and mitigation is not required.

XIII c) The project is forecast to generate a maximum of 41 students at buildout (based on 0.7 school aged children per unit as indicated by discussion with the Rim of the World Unified School District). Mitigation for impacts to the school district is required in the form of standard fees for residential facilities that will be constructed at the site. No additional mitigation is required.

XIII d) This project does not incorporate major recreational facilities within its design. The homeowners and their guest will have access to Lake Arrowhead as members of the Lake Arrowhead Woods Association. Potential impact to recreation facilities is addressed in Section XIV of this document. No additional mitigation is required.

XIII e) The project is being proposed as a private, gated community and it will not add significantly to demand for public facilities or the maintenance of such facilities. Approximately 610 feet of Cumberland Drive will be constructed to County standards and maintained by the County after it is accepted. The implementation of the project will not result in the need for additional public service facilities to maintain acceptable service ratios, response time, or other performance objectives. No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XIV. RECREATION ?				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

XIV a-b) The proposed project will have a less than significant impact on park and recreation resources. There are no public local parks in the Lake Arrowhead area. However, the area is surrounded by National Forest land which contains amenities for campgrounds, trails and an arboretum and allows recreational activities such as hiking, camping, biking, swimming, off-road vehicle use, and fishing. The future residents of the project site and their guests will have access to Lake Arrowhead as members of the Lake Arrowhead Woods Association.

General Plan Open Space Policy OR-46 requires new residential development to provide local park and recreation facilities at a ratio of 3 acres/1,000 population. The proposed project of 58 units would support a population of approximately 183 residents. This population generates a parkland requirement of approximately one-half (1/2) acre, which is not enough to develop or require a local park on-site. The open space proposed on the project site, combined with the recreational opportunities described above, will satisfy the open space and

recreation requirements of the County. In addition, Lake Gregory Regional Park, located approximately eleven miles west of the project site, is a 150-acre facility that offers a full range of active recreation opportunities, including swimming, boating and fishing. No significant impacts on recreational facilities is anticipated and mitigation is not required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC ? Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

XV a-b) A traffic impact analysis, dated February 7, 2002, prepared by LSA Associates, Inc. indicates that current traffic conditions are within the thresholds established as acceptable by the County of San Bernardino. The analysis predicts that all affected local intersections will be within acceptable levels of service after the proposed project is constructed, with the exception of the intersection of SR-173 and Hook Creek Road-Oak Drive in the Year 2020 projections which include the Mill Pond project. In the year 2020, the Level of Service at the intersection of Hook's Creek at SR-173 will be LOS E and F in the a.m. and LOS E and F in the p.m. With mitigation, the LOS for the entire intersection will be LOS B. A signal will be necessary at this intersection to meet County standards for the Year 2020 projections. The total cost of the signal is estimated at \$250,000. The fair share contribution has been determined to be \$16,400, which represents 7% of the total cost of the signal. The proposed project is estimated to generate 555 average daily trips. During the morning peak hour, when

traffic is heaviest, the estimate is 44 average daily trips (ADT) and during the afternoon peak hour, when traffic is heaviest, the estimate is 59 ADT. This accounts for 2 hours during the typical day. The off-peak hours traffic estimate is 452 ADT, for a total estimate of 555 ADT per day. In the year 2020, this will represent a 6.12% contribution to the intersection traffic in the a.m. peak hour and a 6.56% contribution in the p.m. peak hour. The proposed project would contribute to, but not create a direct impact, that results in the degradation in levels of service to a condition worse than the background conditions would be without the project. The below listed mitigation measure is required to ensure that project circulation system impacts will be reduced to a level below significance.

XV c) The project site is not located within an airport land use plan area nor near a private airstrip. The construction of 58 homes will not affect air traffic. The project has no potential to impact air traffic patterns or change air traffic locations. No impact can be identified and mitigation is not required.

XV d) The proposed project will not substantially increase existing road hazards due to design features or incompatible uses. A less than significant impact is anticipated. No mitigation is required.

xv e) Blue Ridge Drive is being proposed as an emergency secondary access for the project. This road is also designated as emergency access for the Cedar Ridge development (Tract 12783) with a total of 136 lots. This roadway is not maintained by the County, gated where it intersects with Cumberland Drive and gated where it intersects with Greenbriar Drive. The Fire Department has indicated that the section between the two gates needs to be widened to a minimum of 16 feet for adequate access in times of emergencies. To the south of the second gate, vehicles will be able to use both Blue Ridge Drive and Greenbriar Drive as emergency access to the south, ultimately connecting with State Highway 18. The Fire Department has indicated that emergency fire equipment would access the site from Cumberland Drive to the north.

The proposed project is consistent with the County General Plan Lake Arrowhead Policies/Actions for Transportation and Circulation. General Plan Section III-C-39 states: "Complete Cumberland Road [sic] from Cedar Glen to State Highway 18 near Santa's Village as a condition of development of the adjacent area." The Public Works Department has agreed to accept the 610 feet of construction of the segment of Cumberland Drive that runs through the project site as a fair share contribution toward the future extension of this Mountain Secondary Highway. The Public Works Department has determined that this is sufficient compliance with the policy set forth above.

XV f) The project is proposing a 40-foot wide looped private road as the main circulation element of the tract with cul-de-sacs reduced to 30-foot wide. According to Land Development/Public Works staff, parking would only be permitted on one side of the street. Staff anticipates more than adequate parking on the project site, since the proposed lots will be large enough to provide adequate off-street parking. No significant impact on parking has been identified and no mitigation is required.

XV g) The proposed project includes a private road system and 610 linear feet of public road extension (Cumberland Drive). The project does not conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks, etc.) No impact has been identified and mitigation is not required.

Caltrans has expressed concern with regard to cumulative traffic impacts due to continued development in this area. They are requesting that the project comply with the County's Congestion Management Plan requirements. The traffic study, however, states that the total number of trips is below the CMP threshold for significance. Caltrans noted, in their letter dated January 17, 2002, that a fair share contribution to the area's regional transportation infrastructure would possibly be adequate mitigation. The project will be required to

contribute \$16,400 to the cost of a traffic signal at Highway 173 and Hook Creek Road – Oak Drive and will be constructing a 610-foot extension of Cumberland Drive.

Mitigation Measure XV-1 The project shall be required to contribute its fair share (currently calculated at \$16,400) to the cost of a traffic signal at the intersection of SR-173 and Hook Creek Road-Oak Drive.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS ?				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

XVI a & e) The wastewater collection system for the project is under the jurisdiction of the Lake Arrowhead Community Services District (LACSD). LACSD infrastructure exists at the intersection of Cumberland Drive and Bald Eagle Ridge at the northeast corner of the proposed project. The 50 lots within Phases I and II will be

served by a gravity wastewater collection system that will connect into the existing system at the intersection of Cumberland Drive and Bald Eagle Ridge. The 8 lots in Phase III will drain via gravity feed into a lift station located at the southerly terminus of Cumberland Drive. These flows will be lifted to the existing manhole at the intersection of Cumberland Drive and Bald Eagle Ridge. The average daily discharge from single family homes is @300 gallons per day. The maximum daily discharge from single family homes is @750 gallons per day. Thus, the project will create, at build out, an estimated 17,400 gallons of wastewater per day with a maximum potential of 43,500 gallons per day.

Two portions of the downstream wastewater system are currently operating above capacity. The overburdened sections of pipe are located at the intersection of Cumberland Drive, Hook's Creek Road and State Highway 173, as well as at the intersection of SR-173 and Emerald Drive. The cause of the capacity constriction is apparently flat grades. Mitigation measures are listed below to reduce project impacts to a level below significance.

XVI b) The LACSD has indicated that there are sufficient water resources in place or required of the developer that will ensure water service until 2020.

The proposed project includes the construction of a 500,000 M/L gallon water reservoir, pump house, pressure tank and associated piping at 6,000 feet above mean sea level. The applicant's responsibility is a 300,000 gallon tank. The LACSD will be responsible for any capacity above 300,000 gallons. All lots in this tentative tract below 5,900 feet above MSL and all lots in Tract 12783-1 currently served by the hydropneumatic tank at the 5,700 feet above MSL reservoir will be served by a gravity booster system and fire pump. Mitigation measures are listed below.

XVI c) The northwesterly portion of the site drains in a northerly direction into Orchard Creek and, ultimately into Lake Arrowhead. The southeasterly portion of the site drains in a southeasterly direction into Hook's Creek, thence northerly to Deep Creek and, ultimately, the Mojave River. Drainage improvements will be constructed to convey flows into natural drainages north and east of the project. Two catch basins will be constructed on the south side of the entrance road and flows will be conveyed by means of an underground pipe to the canyon on the northeast side of Cumberland Drive to the tract boundary. The slope from Cumberland Drive will encroach within the canyon located on the northeast side of the canyon, thus the proposed channel will be constructed at the toe of the slope from the northwest corner of Lot 1 of Phase III southeasterly, parallel to Cumberland Drive to the tract boundary. The drainage channel will be constructed using projecting angled rocks grouted into place so that the cross section and the friction factor will be approximately that of the existing natural canyon.

A trapezoidal channel will be constructed at the north tract boundary to capture flows from Cumberland Drive, from the entrance road at Bald Eagle Ridge to the east tract boundary. These flows will then travel easterly in the natural canyon to Hook's Creek.

According to Don Bunts, the water engineer for LACSD, long term cumulative impacts on waste water collection systems will be addressed via a special assessment from all property owners in an amount to cover the cost of modification of the system. The point of exaction date is not yet known. The direct impacts of the proposed project will be less than significant and no mitigation is required.

XVI d) The project will be supplied with water by the Lake Arrowhead Community Services District. This water agency relies almost entirely on water withdrawals from Lake Arrowhead. The Lake obtains its water from precipitation and surface run-off, as well as sub-surface springs. Wells are only utilized in the Deer Lodge Park

area. The man-made lake has a capacity of 47,700 acre feet of water. The report indicates that a safe yield has been established, through previous studies, to be approximately 4,000 acre feet per year. The District calculates 300 gallons per day demand per connection. The proposed project would, therefore, require an estimated 17,400 gallons per day after build out (equivalent to 19.5 acre feet annually).

The LACSD 2000 Urban Water Management Plan (UWMP), dated December, 2000, and prepared by Water 3 Engineering, Inc., based their projections on an annual growth rate of 135 connections per year. Ultimate build-out of the community, based on available private land, is expected to be about 10,000 connections. In arriving at this number, the LACSD took into consideration the General Plan Land Use Designations for the service area, calculating ultimate build-out together with the number of existing parcels and factoring in the slopes on vacant property. Based on the General Plan designation, more than the proposed number of 58 connections would be assumed for the project site. The District determined that ultimate build-out would be between 9,800 to 10,000 connections. In 2000, when the report was prepared, there were 7,807 connections, leaving a balance of 2,193 connections available before capacity is reached.

Since 1975, annual water use in the LACSD service area has tripled. Coupled with the drought the region is currently experiencing, there is a concern relating to the ultimate capacity of Lake Arrowhead to supply water for the area over the long term. Lake levels have dropped, water has receded from the boat docks, and the LACSD, in April of this year, declared the community's first Stage 2 drought alert, meaning that lake levels are down to between 5093.6 – 5087 feet. A Stage 2 alert requires limiting outdoor watering to three days a week during specific hours, restricting car washing and other activities, and laying the groundwork for a system of fines if residents fail to comply. As the drought continues, other emergency measures may be enacted.

The LACSD Urban Water Management Plan report states that conservation measures, which are currently taking place or have been identified in their Plan, will assist in maintaining sufficient supply to meet anticipated demands to the year 2020. The District adopted Ordinance No. 48 on May 23, 2000, which provides for shortage management related to droughts and temporary exceedence of treatment plant capacity during peak demand periods. Conservation measures identified in the report also include such things as low-flow plumbing fixtures and high-efficiency washing machines. It is estimated that such passive conservation has lowered demands by approximately 10%. Provided the conservation measures outlined in the LACSD Urban Water Management Plan are incorporated as mitigation measures into the conditions of approval of this project, no significant short term impacts to water resources are anticipated to occur from implementing the proposed project.

It is generally accepted that residential structures, in general, will have a normal useful life of 50+ years. Assurances that water resources will be available to service this project until 2020, a period of 18 years, seems inadequate. The District's report does not address service beyond 2020. There is currently no service agreement with the Crestline Lake Arrowhead Water Agency which provides water, at a price, from the State Water Project. Recycled sewer water, which is subject to tertiary treatment and denitrification, is currently being used to water alfalfa fields in Hesperia and, ultimately, to recharge the overdrafted Mojave River. The direct use of such water for residential purposes is restricted by substantial costs associated with installing the necessary pipelines and pump stations to deliver recycled water to identified potential users. Based on high cost and limited potential benefit, the LACSD has determined that the implementation of a recycled water system for direct use continues to be impractical for the District. It is also possible that arrangements will be made for purchase of State water supplies via the Crestline-Lake Arrowhead Water Agency (CLAWA). The current drought may end this winter as weather forecasters anticipate a mild El Niño condition which should supply rain and snow to the Mountain regions. There is no long term cumulative impact anticipated within the

twenty-year planning period of the LASCSD Urban Water Management Plan. No significant impact is expected and additional mitigation is not required.

XVI f-g) There are no landfills in the mountain region. However, Mountain Disposal Services, Inc. will provide waste disposal services. Waste is taken to the Heaps Peak transfer station approximately 3 miles east of the proposed project. The San Timoteo Sanitary Landfills in Redlands and the Mid-Valley in Rialto have room to accommodate this additional waste flow. Adequate capacity has been identified in the valley landfills to meet growth with the County service areas for the next ten or more years. The County has implemented recycling programs as required by law and in accordance with the adopted Source Reduction and Recycling Element. No additional mitigation is required.

Possible significant impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significance:

Mitigation Measure XVI-1 The project shall contribute its fair share to the cost for the correction of capacity constrictors at two locations in the existing wastewater collection system downstream of the proposed project. These capacity limitations must be corrected prior to recordation of the final map. The actual fair share contribution has not yet been calculated.

Mitigation Measure XVI-2 The developer and each subsequent property owner shall comply with all conservation measures outlined in the Lake Arrowhead Community Services District's 2000 Urban Water Management Plan and any revisions to that Plan which may be adopted in the future.

Mitigation Measure XVI-3 The improvements being required by the LACSD, including but not limited to, construction of a 300,000 gallon water reservoir, pump house, pressure tank and associated piping, hydropneumatic tank, gravity booster system and fire pump, a diesel standby generator, and pressure reducing station, shall be constructed per LACSD requirements. The water storage reservoir may be expanded up to 500,000 gallon capacity at the expense of the LACSD. The Zone 2 pumping station shall be expanded at Cedar Glen Water Treatment Plant at the Developer's cost. Pertinent easements and the tank parcel shall be deeded to the LACSD.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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VII. MANDATORY FINDINGS OF SIGNIFICANCE—

- | | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population ot drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

XVII a) The active presence of the endangered Southern Rubber Boa has been determined. Five (5) of the Southern Rubber Boa have been found on site. The entire site has been determined to be occupied SRB habitat and within the known range of the SRB. Potentially significant impacts in an area identified as having scenic values have been identified, relating to the loss of a substantial number of trees, 75,000 cubic yards of grading, ridgeline development, and substantial alteration of the natural contours of the site have been identified in this initial study. Potentially significant inconsistencies with the goals and policies of the General Plan have also been identified. These potentially significant impacts should be evaluated in an environmental impact report.

XVII b) Cumulative impacts have not been identified within this initial study.

XVII c) Neither direct nor indirect adverse effects on human beings have been identified in this initial study.

The mitigation measures listed below would reduce many potential impacts of the proposed project to a level below significance. However, for the reasons set forth in this document, the proposed project would still have the potential to significantly impact the environment in the area of Aesthetics, Biological Resources, Geology/Soils, and Land Use/Planning. These potentially significant impacts should be evaluated in an environmental impact report.

XVIII. MITIGATION MEASURES

(Any mitigation measures which are not 'self-monitoring' shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

Mitigation Measure I a-c) A precise building envelope for all lots shall be shown on the Composite Development Plan (CDP), incorporating all areas of land disturbance and identifying all trees 6 inches in diameter or greater to be removed. If a precise building envelope is not shown on the CDP, any land disturbance shall be approved by the Planning Division prior to issuance of building permits for any lot. Tree removal shall be approved by the Planning Division for each lot in the tract. These requirements shall be noted on the CDP.

Mitigation Measure III-1 During construction, the contractor shall apply water to the disturbed portions of the project site at least two times per day, in the morning and in the afternoon, or more often if fugitive dust is observed migrating from the site. On days when wind speeds are sufficient to transport fugitive dust beyond the working area boundary, the contractor shall increase watering to the point that fugitive dust no longer leaves the property (typically a moisture content of 12%), and/or the contractor will terminate grading or loading operations.

Mitigation Measure III-2 During construction, the contractor shall provide verification that all construction equipment is in proper tune per the manufacturer's recommendations.

Mitigation Measure III-3 Revisions to SCAQMD Rule 403 require that tires of vehicles be washed before a vehicle leaves the project site and enters a paved road. These revisions also require that dirt on paved surfaces be removed daily to minimize generation of fugitive dust. The contractor shall implement both of these measures during on-site construction activities.

Mitigation Measure IV-1 A qualified forester shall identify trees that could potentially be impacted by construction after survey stakes are in place. All efforts shall be made, including implementation of protective measures, to avoid removing or damaging trees with a DBH greater than 6 inches, during construction.

Mitigation Measure IV-2 A Timber Harvest Plan shall be required, pursuant to the State Forest Practice Act, to be approved by the California Department of Forestry (CDF). A Timberland Conversion Permit is also required from CDF, prior to removal of native trees from the project site.

Mitigation Measure IV-3 A tree inventory within a realistic development envelope shall be prepared, identifying the trees by species and size (diameter) per Development Code requirements. A Tree Preservation and Management Plan shall also be prepared. Both these documents shall be prepared by a State-Registered Professional Forester, for approval by the County, prior to removal of native trees from the project site.

Mitigation Measure V-1 - Prior to the issuance of grading permits, any land disturbing activity or recordation of the tract map, an archaeological and historical records test program shall be completed to locate and identify any archeological or historical deposits that might be present. If archeological or historical resources are encountered, adequate funding shall be provided by the developer to collect, curate and report on these resources.

Mitigation Measure V-2 – If archeological, paleontological and/or historical resources are uncovered during ground disturbing activities, all work in that area shall cease. A qualified expert (e.g. archeologist), as determined by County Planning, in consultation with the County Museum, shall be hired to record the find and recommend any further mitigation. If human remains are encountered on the property, then the County Coroner's Office must be contacted within 24 hours of the find, and all work halted until a clearance is given by that office and any other involved agencies. If the remains are determined to be of Native American origin, the local Native American representative shall be notified.

Mitigation Measure VI-1 – Place as a note on the Composite Development Plan: Foundation and grading plans must be reviewed and signed by a geotechnical engineer. Unless superceded by a subsequent geotechnical investigation, must reference the geotechnical report for the tract (dated May 29, 2001) and the response report (dated September 11, 2001).

Mitigation Measure VI-2 – Place as a note on the Composite Development Plan: Unless otherwise recommended by a geotechnical engineer, footings shall be a minimum depth of 24 inches and bear into competent bedrock or be underlain by at least 24 inches of compacted fill. All footing excavations must be inspected and approved by an engineering geologist when placed within bedrock or a geotechnical engineer when placed within fill.

Mitigation Measure VI-3 – Place as a note on the Composite Development Plan: The May 29, 2001 report concludes that roadway cut slopes within bedrock as steep as 1.5:1 (horizontal to vertical) and as high as 45 feet will be stable. Steeper or higher cut slopes shall require additional evaluation.

Mitigation Measure VI-4 – Place as a note on the Composite Development Plan: The Project Geotechnical Engineer and Project Engineering Geologist must review and sign grading plans for the road construction as well as foundation plans for crib wall construction. A compaction report must be submitted upon completion of rough grading for the roadways and associated cuts and fills.

Mitigation Measure VII-1 - If a hazardous or toxic substance is discovered or released during construction, the applicant and/or contractor shall properly clean up and remove any contaminated soil or other material; restore the affected area to background conditions or to regulatory threshold levels for the contaminant(s) accidentally released or discovered; and deliver the contaminated material to an appropriate treatment, recycling or landfill facility in accordance with the regulations of the type of contaminant accidentally released and collected for management.

Mitigation Measure VII-2 The fuel modification requirements shall be implemented through Covenants, Conditions and Restrictions of Record (CC&R's) and the Composite Development Plan (CDP).

Mitigation Measure VII-3 The Covenants, Conditions, and Restrictions (CC&R's) for the project shall include a provision to prohibit the stockpiling, disposal, or dumping of any solid or liquid waste material or chemical on any residential lot (e.g., automobile oil, or other fluids, cleaners, etc.) during construction or occupancy.

Mitigation Measure VII-4 Prior to the issuance of building permits, each individual lot owner shall meet with County Fire to determine the necessity of one-hour construction and to review fuel modification requirements and other safety measures identified in the Fire Safety Analysis. This requirement shall be addressed in the Covenants, Conditions and Restrictions of Record (CC&R's) and referenced on the Composite Development Plan (CDP) for the project.

Mitigation Measure VII-5 – Automatic fire sprinklers shall be installed in all structures.

Mitigation Measure VII-6 – This development is located in the FR-2 Overlay. This development shall comply with Fire Safety Overlay Two (FR-2) conditions as adopted in County Ordinance No. 3341. Homes that will be constructed on Lots 35, 39, 40, 45, 49-52, 54, and 55 shall have fire conditions reviewed structure by structure to determine if they are subject to FR-1 or FR-2 Fire Safety Overlay requirements. All other structures shall meet the FR-2 building requirements. The developer shall use double-paned windows and one-hour construction in specified areas. Each individual lot owner shall meet with San Bernardino County Fire Department to determine necessity of 1-hour construction prior to the issuance of building permits. This requirement shall be addressed in the CC&R's for the tract.

Mitigation Measure VII-7 – A one-hundred (100) foot wide fuel modification zone, in compliance with County standards and the fire protection analysis is required. This fuel modification zone shall be shown on the Composite Development Plan for this tract.

Mitigation Measure VII-8 – Due to the remote location, individual lot owners shall be required to provide their own fire protection measures as determined appropriate by the Fire Department prior to the issuance of any building permit. Fire protection measures may include all or some of the following:

- 5) Individual fire protection water systems for each lot;
- 6) Automatic fire sprinklers for all structures;
- 7) Installation of road surfacing;
- 8) A legal, binding road maintenance agreement establishing improvements

from each project lot to a County-Maintained road.

Mitigation Measure VII-9 - All homes constructed shall comply with Fire Standard No. F17D (residential fire sprinklers) for homes less than 5,000 square feet and Standard No. F18R for homes over 5,000 square feet.

Mitigation Measure VII-10 - Fire hydrants shall be spaced at 300-foot intervals.

Mitigation Measure VII-11 - Wood shake roofs shall not be permitted in this tract.

Mitigation Measure VII-12 - Fuel modification for the open space lots and long-term fuel maintenance shall be addressed in the CC&R's for the Homeowners' Association (HOA).

Mitigation Measure VII-13 - Individual lots shall be maintained by homeowners per the Fuel Modification Plan and shall be addressed in the CC&R's.

Mitigation Measure VII-14 – Emergency access roads shall be a minimum of 16 feet wide.

Mitigation Measure VII-15 – Non-combustible insulation paper shall be used in attic vents with bafflers that face non-wildland side.

Mitigation Measure VIII-1 The developer shall provide adequate drainage facilities that will ensure that storm water runoff from the development does not cause an increase in downstream erosion, sedimentation, or flood hazards that exceed existing surface flows off the property. This may be accomplished by installing detention facilities, channel erosion control measures (bank protection or energy dissipation facilities), or other modifications to the road drainage system that will ensure no adverse impacts to the channel or the land uses downstream from the proposed development.

Mitigation Measure VIII – 2 Best Management Practices shall be incorporated into the Storm Water Pollution Prevention Plan that must be prepared and implemented for the project under existing Clean Water Act regulations. The “BMP's for Erosion and Sediment Control and Storm Water Retention/Detention in Western Riverside and San Bernardino Counties” identifies specific measures that can be used to control water pollutants. The developer shall select from this mix or identify alternatives for approval by the County that will achieve a 60 to 80 percent removal of sediment, total phosphorus and total nitrogen.

Mitigation Measure VIII-3 The applicant shall implement the on-site drainage system improvements summarized in the July, 2001 Drainage Study Prepared by McKeever Engineering.

Mitigation Measure XI-1 Except during emergency conditions, outside construction activities shall be limited to daylight hours and no later than 7 p.m. on any given day. No outdoor construction will be permitted on Sundays or holidays, except during emergency conditions.

Mitigation Measure XI –2 All construction equipment shall be equipped with appropriate noise attenuation devices, such as mufflers.

Mitigation Measure XI-3 If noise complaints demonstrate a significant construction noise effect on a sensitive receptor (as measured at the receptor site (and compared to County noise significance thresholds), the County shall require that the construction contractor provide temporary noise attenuation panels or other measures to reduce impacts to the sensitive receptor(s) to within County thresholds.

Mitigation Measure XV-1 The project shall be required to contribute its fair share (currently calculated at \$16,400) to the cost of a traffic signal at the intersection of SR-173 and Hook's Creek Road-Oak Drive.

Mitigation Measure XVI-1 The project shall contribute its fair share to the cost for the correction of capacity constrictors at two locations in the existing wastewater collection system downstream of the proposed project. These capacity limitations must be corrected prior to recordation of the final map. The actual fair share contribution has not yet been calculated.

Mitigation Measure XVI-2 The developer and each subsequent property owner shall comply with all conservation measures outlined in the Lake Arrowhead Community Services District's 2000 Urban Water Management Plan and any revisions to that Plan which may be adopted in the future.

Mitigation Measure XVI-3 The improvements being required by the LACSD, including but not limited to, construction of a 300,000 gallon water reservoir, pump house, pressure tank and associated piping, hydropneumatic tank, gravity booster system and fire pump, a diesel standby generator, and pressure reducing station, shall be constructed per LACSD requirements. The water storage reservoir may be expanded up to 500,000 gallon capacity at the expense of the LACSD. The Zone 2 pumping station shall be expanded at Cedar Glen Water Treatment Plant at the Developer's cost. Pertinent easements and the tank parcel shall be deeded to the LACSD.

An Environmental Impact Report is required. Additional Mitigation Measures will be identified in the EIR and a Mitigation Monitoring Program will be prepared for those mitigation measures that are not self-monitoring.

REFERENCES (List author or agency, date, title)

Alquist-Priolo Special Studies Zone Act Map Series (PRC 27500)
California Department of Water Resources, Bulletin #118 (Critical Regional Aquifers), 1975.
CEQA Guidelines
South Coast Air Quality CEQA Handbook, 1993
California Standard Specifications, July 1992
County Museum Archaeological Information Center
County of San Bernardino, Countywide Integrated Waste Management Plan, March 1995
County of San Bernardino Development Code, Current Edition
County of San Bernardino General Plan, adopted 1989, revised 1998 and the Background Appendix
County of San Bernardino Hazard Overlay Maps
County of San Bernardino Identified Hazardous Materials Waste Sites List, April 1998
County Road Planning and Design Standards
Environmental Impact Report, San Bernardino County General Plan, 1989
Federal Emergency Management Agency Flood Insurance Rate Map and Flood Boundary Map
General Biological Assessment, prepared by Thomas Leslie Corporation, dated September 7, 2001
Focused Southern Rubber Boa Focused Surveys, prepared by Thomas Leslie Corporation, dated June 4, 2002
Preliminary Geotechnical Investigation, prepared by IGC Consultants, May 29, 2001
Traffic Impact Analysis, prepared by LSA, dated March 27, 2001, revised February 7, 2002
Drainage Study, prepared by W. J. McKeever, Inc., dated July 27, 2001
Fiscal Impact Analysis, prepared by Stanley R. Hoffman, Associates, dated April,
Forester's Report, prepared by James Bridges and John Hatcher, dated June, 2001, revised March 11, 2002
Mill Pond TR 15740 Environmental Initial Study, prepared by Tom Dodson and Associates, April, 199
Cedar Ridge TR 12783 documents from December 21, 1984
Eagle Ridge at Lake Arrowhead EIR, prepared by The Keith Companies, and dated November 12, 1999
Lake Arrowhead Community Services District (LACSD) Urban Water Management Plan, dated May, 2000
Fuel Modification Plan by John Hatcher, Registered Professional Forester, received by Fire on 8/23/2002
Slope Analysis Map prepared by McKeever Engineering, April 24, 2002